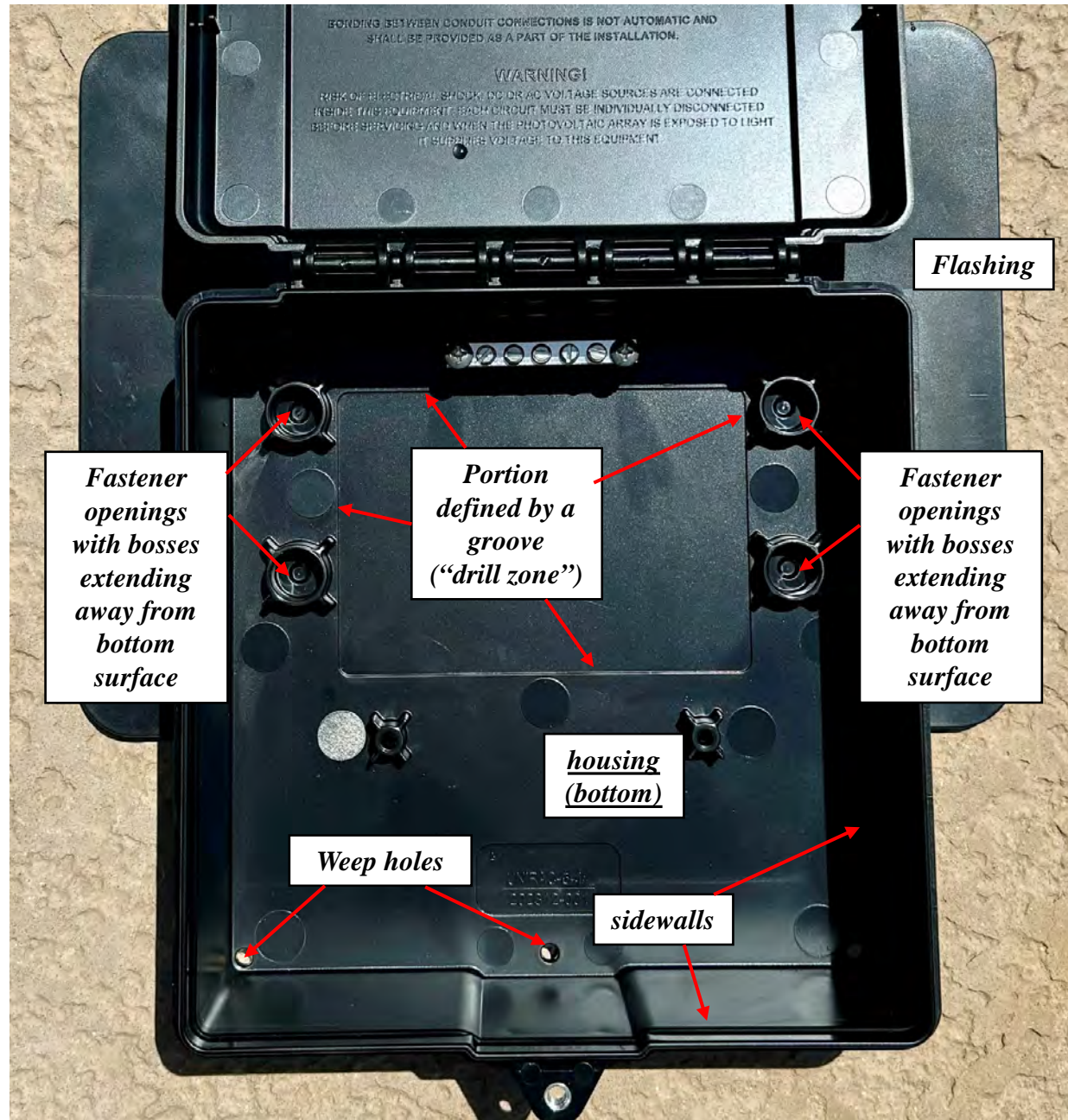


**US Patent No. 12,003,085 - Claim 1*****A junction box comprising:***

*a **housing** comprising sidewalls and a bottom attached to the sidewalls, the bottom having an interior side and an exterior side, the exterior side of the bottom is configured to be mounted to a roof of a structure;*

*a **weep hole** defined in the housing;*

*a **flashing** attached to the housing and extending horizontally from the housing, the flashing formed with the housing;*

*a **portion defined in the interior side of the bottom defined by a groove**, the portion defining a position for creating a hole in the bottom; and*

*a **plurality of fastener openings** in the bottom, each fastener opening configured for a fastener positionable within the fastener opening, wherein securing a fastener through a fastener opening of the plurality of fastener openings contributes to securing the housing to the roof*

*wherein **each of the plurality of fastener openings in the bottom comprises a boss**, each boss extending away from a bottom interior surface of the bottom.*

**EXHIBIT****1**





## *085 Patent - Claim 2*

*The junction box of claim 1, wherein a first thickness of the portion is less than a second thickness of the bottom.*



## *085 Patent – Claim 3*

*The junction box of claim 1, wherein the weep hole is defined in the bottom.*



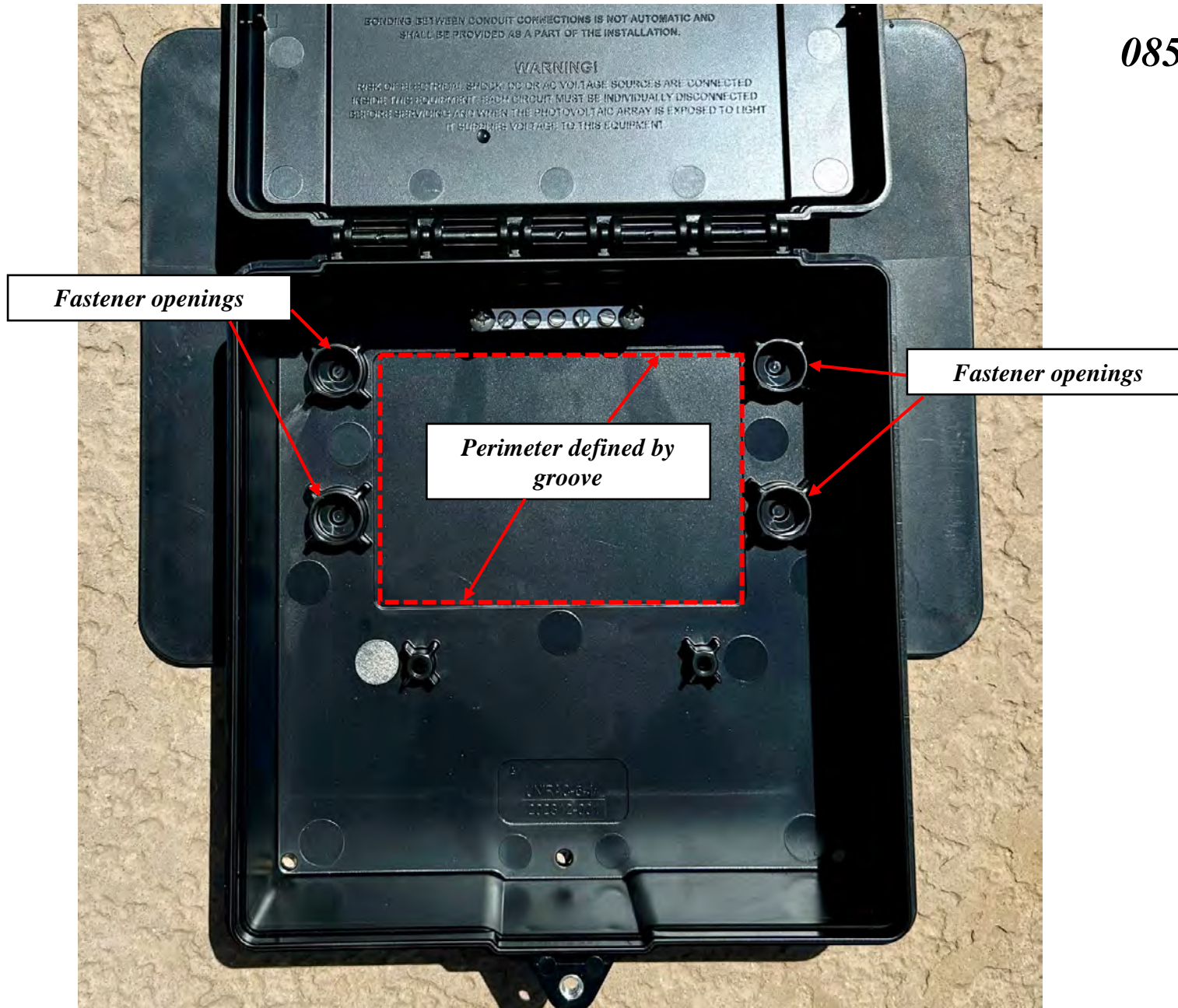


## ***085 Patent – Claim 4***

*The junction box of claim 1, wherein the weep hole is configured to permit fluid that is positioned within an internal volume of the housing to exit via the weep hole.*

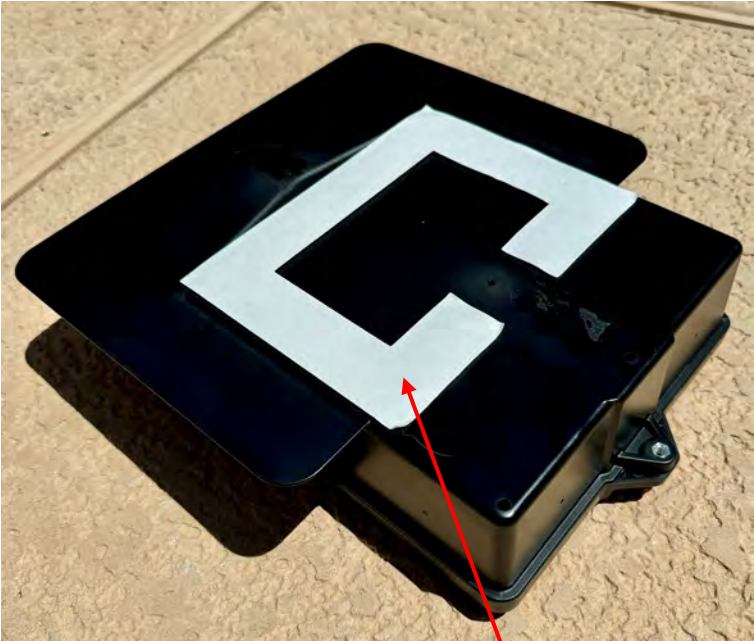
## *085 Patent – Claim 5*

*The junction box of claim 1, wherein each of the plurality of fasteners openings are located outside a perimeter defined by the groove.*





*085 Patent – Claim 6*



*The junction box of claim 5, further comprising a sealant on the exterior side of the bottom.*

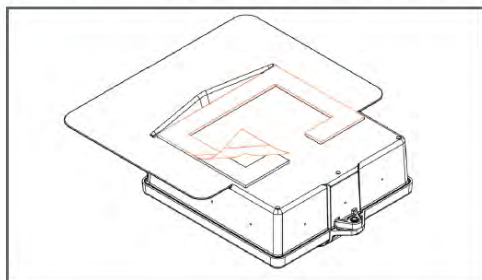
*Sealant (shown on exterior of bottom)*

## 085 Patent – Claim 7



## INSTALLATION STEPS

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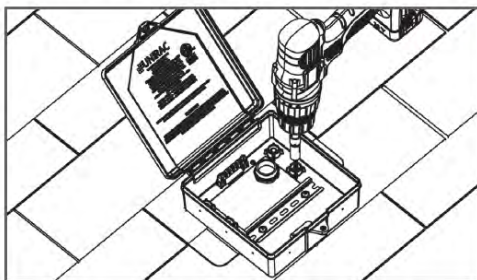


### STEP 5: PEEL OFF BUTYL COVER

Gently peel butyl release paper off on the bottom of the Solobox Comp. No need to apply roofing sealant.

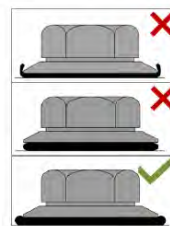


To maintain butyl flashing performance, Unirac does not recommend installing when ambient and/or roof temperatures are below 5°F or above 180°F.



### STEP 6: SECURE SOLOBOX COMP TO ROOF

Slide the Solobox Comp into place and secure it to the roof decking through the mounting holes using the 4 provided decking screws. Torque until EPDM washers expand.



Do not over-torque the deck screws.

When proper torque is applied, the EPDM washer should slightly expand out from the sides as shown in the image.

*The junction box of claim 6, wherein the fastener is configured to compress the sealant against the roof.*

## ***085 Patent – Claim 8***



*The junction box of claim 1, further comprising an exterior groove on the exterior side of the bottom.*

*This claim is practiced by EZ Solar, but likely NOT present in the Unirac product.*





## *085 Patent – Claim 9*

*The junction box of claim 1, each of the bosses are configured to surround a portion of the fastener above a bottom plane at the bottom interior surface when the fastener is positioned in the fastener opening of the boss*



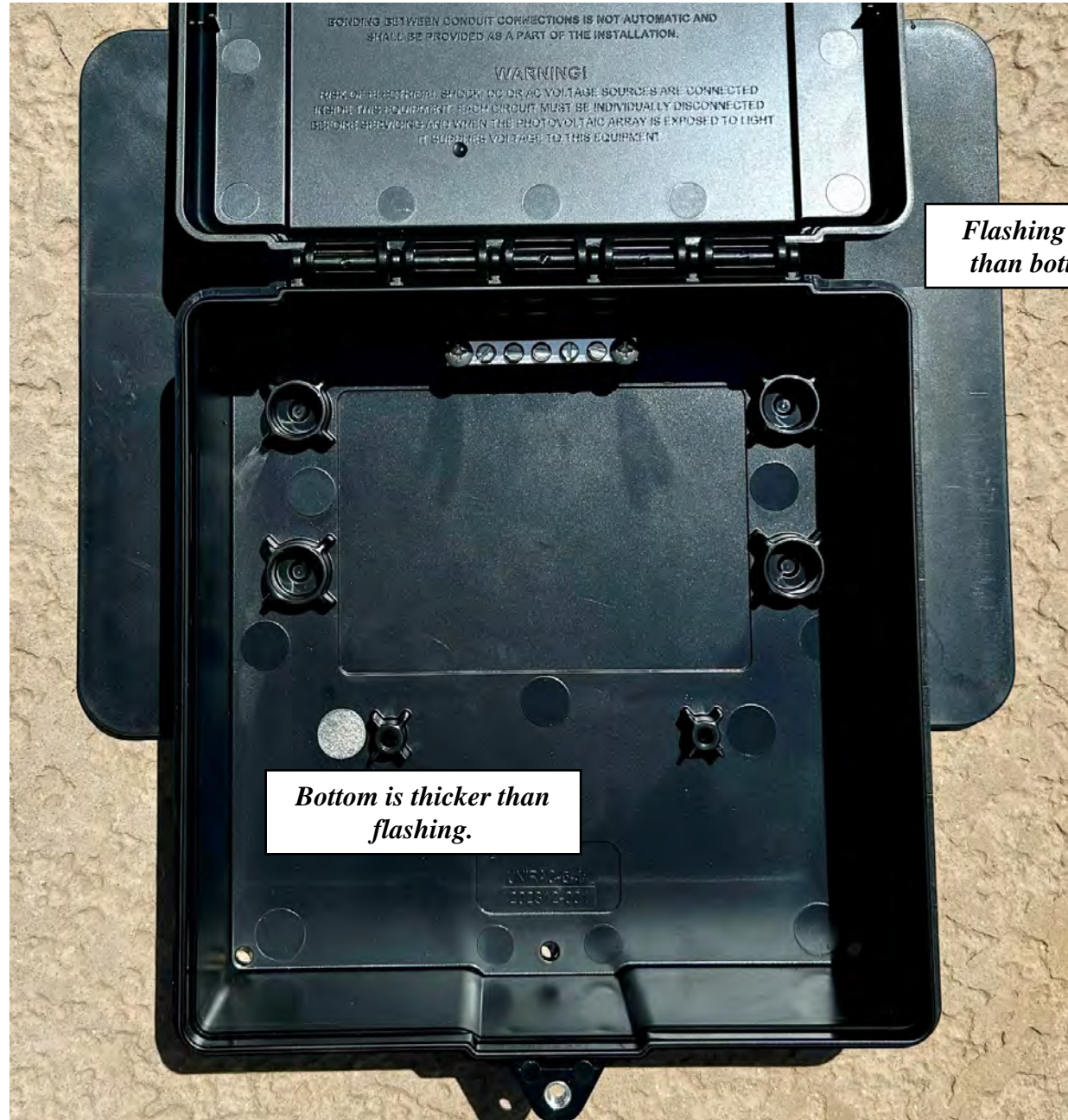
## *085 Patent – Claim 10*

*The junction box of claim 1, wherein the interior side of the bottom has a first thickness and the flashing has a second thickness.*

*Thickness of flashing is different from bottom thickness*

*Thickness of bottom is different from flashing thickness*





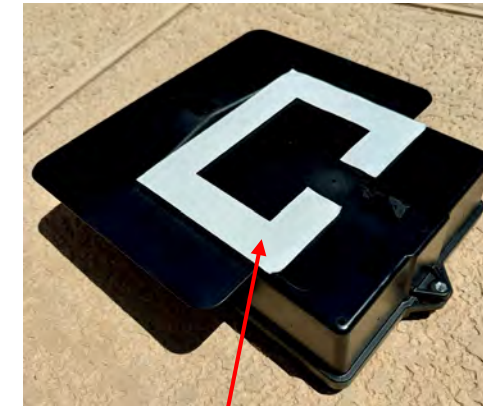
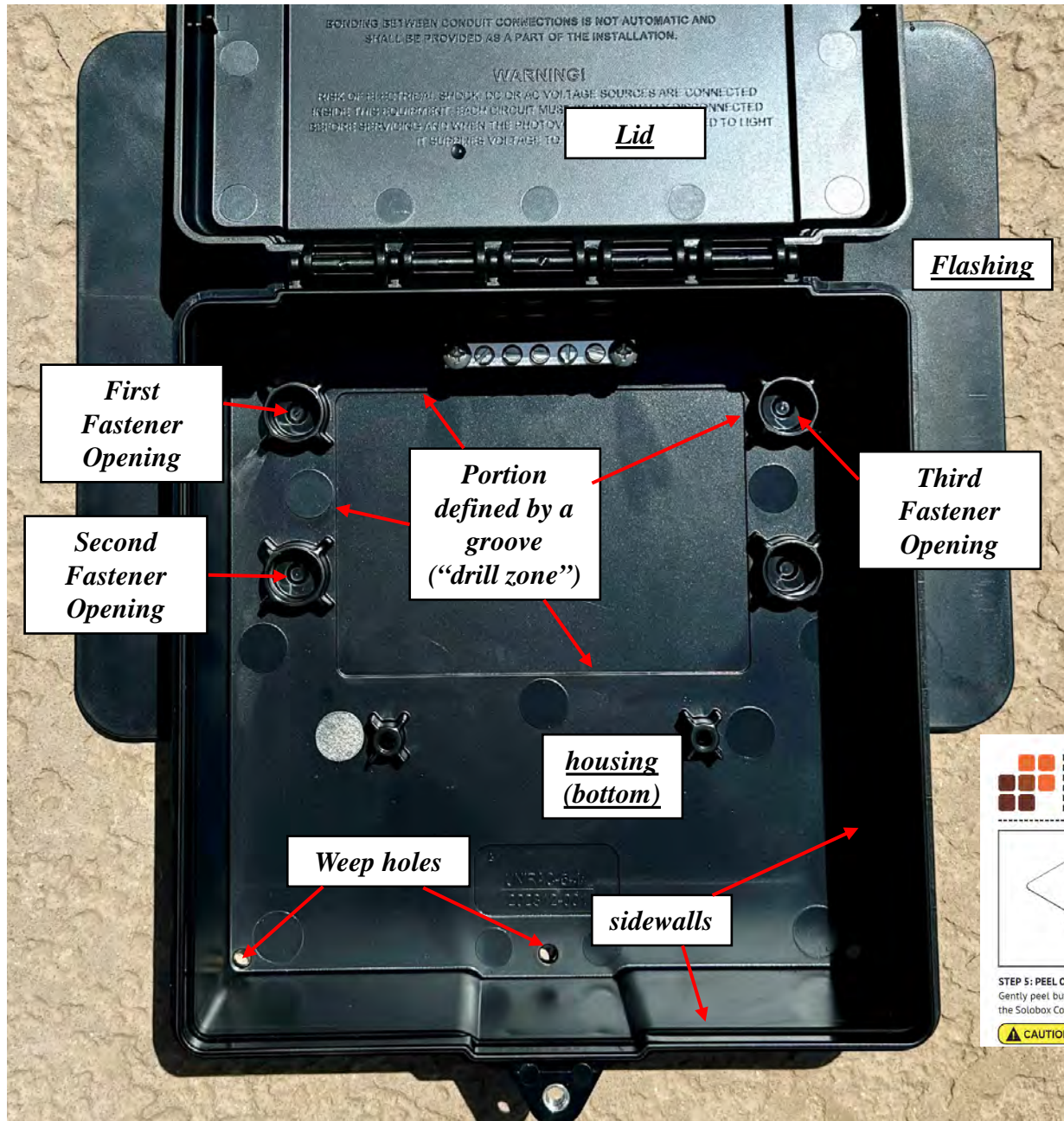
## *085 Patent – Claim 11*

*Flashing is less thick  
than bottom of box.*

*The junction box of claim 10, wherein the  
first thickness is greater than the second  
thickness.*

*Bottom is thicker than  
flashing.*



**085 Patent – Claim 12**

**Sealant (shown on exterior of bottom)**



**A junction box comprising:**

a **housing** comprising sidewalls and a bottom attached to the sidewalls, the bottom have an interior side and an exterior side, the exterior side of the bottom is configured to be mounted to a roof of a structure;

a **lid** detachable coupled to the housing, the lid, the sidewalls, and the bottom defining a volume of the housing;

a **weep hole** defined in the housing;

a **flashing** attached to the housing and extending horizontally from the housing, the flashing formed with the housing;

a **portion defined in the interior side of the bottom defined by a second groove**, the portion defining a position for creating a hole in the bottom;

**sealant** disposed on the exterior side of the bottom;

a **first fastener opening** in the bottom outside the portion;

a **second fastener opening** in the bottom outside of the portion; and

a **third fastener opening** in the bottom outside of the portion, wherein the first fastener opening, the second fastener opening, and the third fastener opening are configured for a **fastener installable in the fastener openings to compress the sealant and the housing against the roof.**





## ***085 Patent – Claim 13***

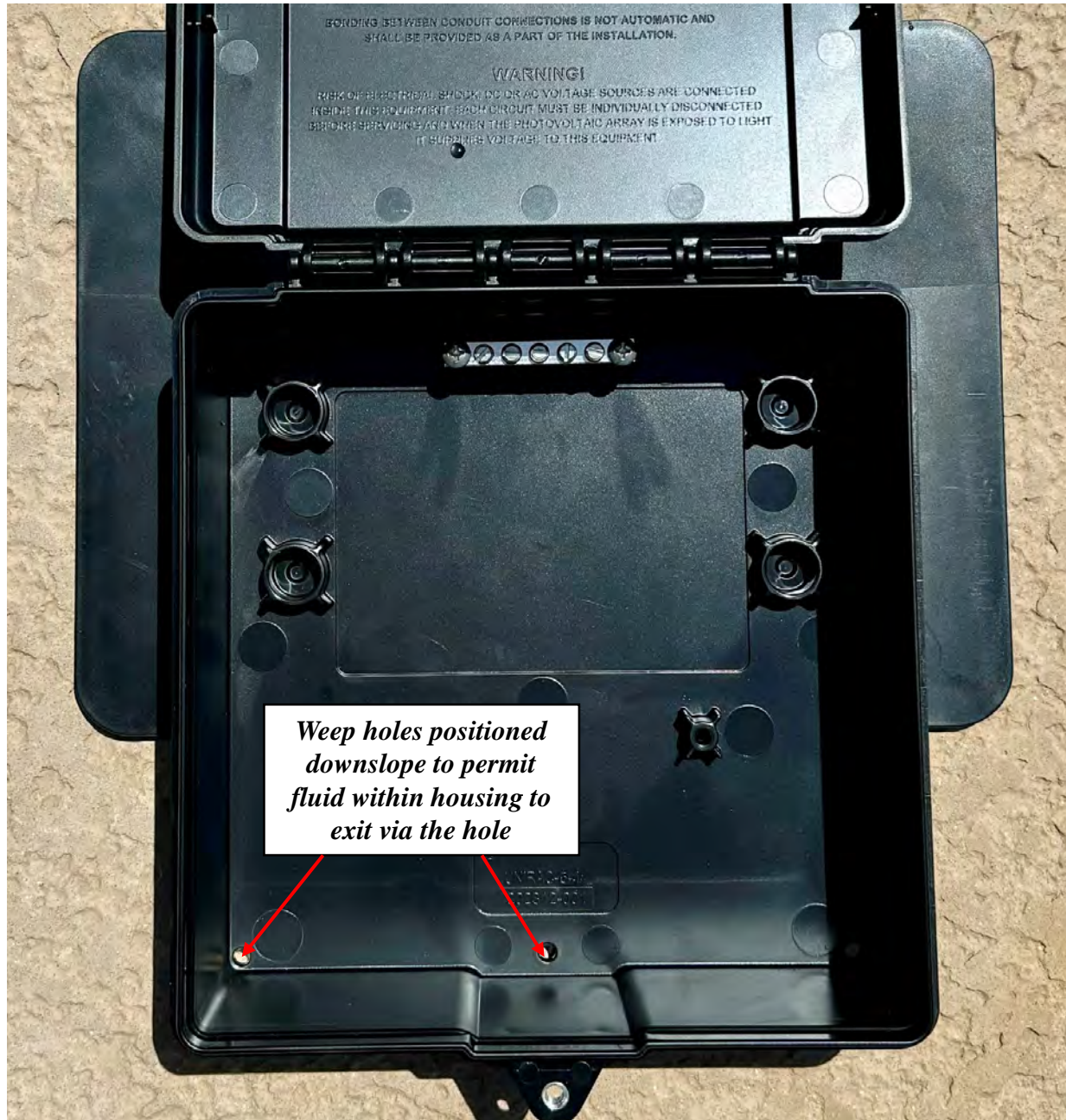
*The junction box of claim 12, wherein a first thickness of the portion is less than a second thickness of the bottom.*



### *085 Patent - Claim 14*

*The junction box of claim 12, wherein the weep hole is defined in the bottom.*





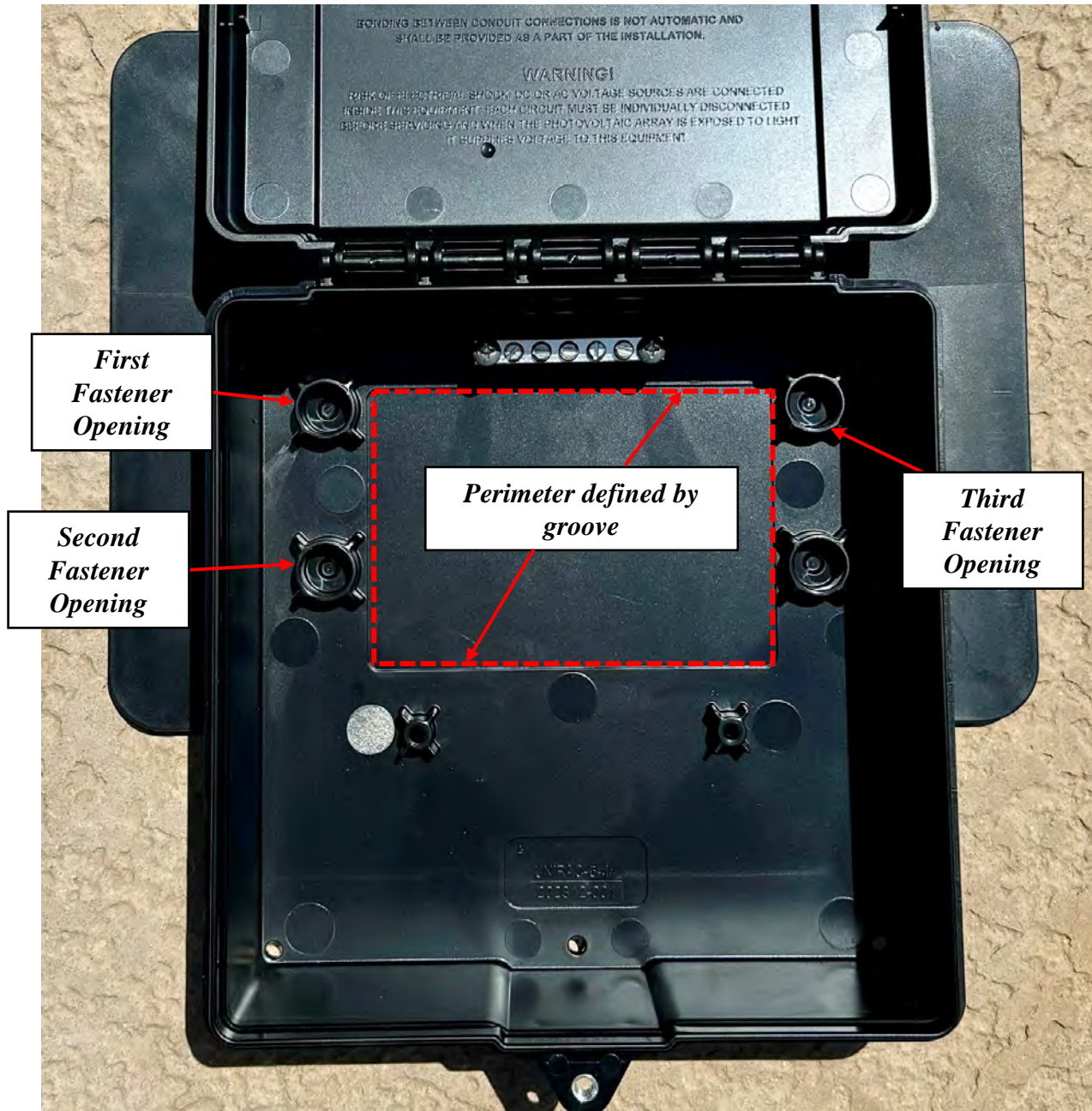
*Weep holes positioned  
downslope to permit  
fluid within housing to  
exit via the hole*

### ***085 Patent – Claim 15***

*The junction box of claim 12, wherein the weep hole is configured to permit fluid that is positioned within an internal volume of the housing to exit via the weep hole.*

### *085 Patent – Claim 16*

*The junction box of claim 12, wherein each of the first fastener opening, the second fastener opening, and the third fastener opening are defined outside a perimeter defined by the second groove.*





***085 Patent – Claim 17***

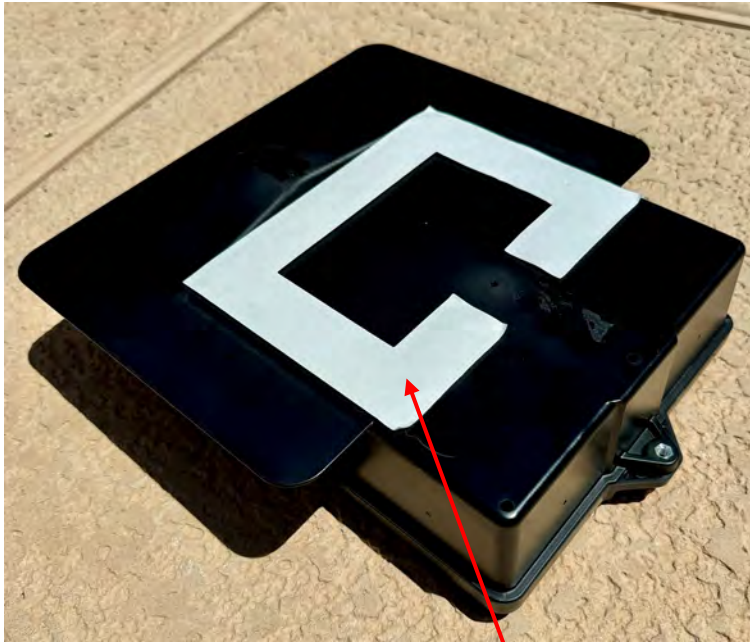


*The junction box of claim 12, further comprising a first groove in the exterior side of the bottom.*

*This claim is practiced by EZ Solar, but likely NOT present in the Unirac product.*

## 085 Patent – Claim 18

*The junction box of claim 12, wherein the sealant is an adhesive material.*



*Sealant (shown on exterior  
of bottom)*

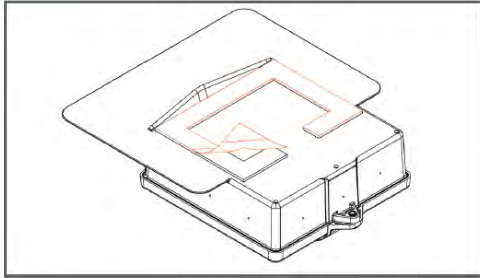


## 085 Patent – Claim 19



## INSTALLATION STEPS

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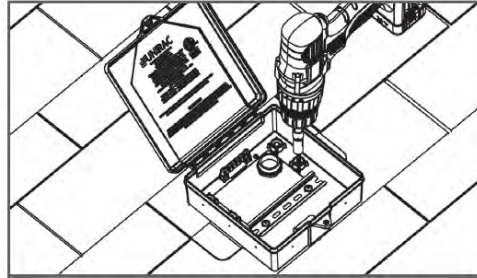


### STEP 5: PEEL OFF BUTYL COVER

Gently peel butyl release paper off on the bottom of the Solobox Comp. No need to apply roofing sealant.

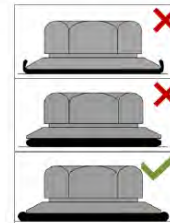
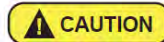


To maintain butyl flashing performance, Unirac does not recommend installing when ambient and/or roof temperatures are below 5°F or above 180°F.



### STEP 6: SECURE SOLOBOX COMP TO ROOF

Slide the Solobox Comp into place and secure it to the roof decking through the mounting holes using the 4 provided decking screws. Torque until EPDM washers expand.



Do not over-torque the deck screws.

When proper torque is applied, the EPDM washer should slightly expand out from the sides as shown in the image.

*The junction box of claim 12, wherein the sealant is configured to adhere to the bottom of the housing.*

**085 Patent – Claim 20**

A junction box comprising:

a **housing** comprising sidewalls and a bottom attached to the sidewalls, the bottom having an interior side and an exterior side, the exterior side of the bottom is configured to be mounted to a roof of a structure;

a **lid** detachable coupled to the housing, the lid, the sidewalls, and the bottom defining a volume of the housing;

a **weep hole** defined in the housing;

a **flashing** attached to the housing and extending horizontally from the housing, the flashing formed with the housing;

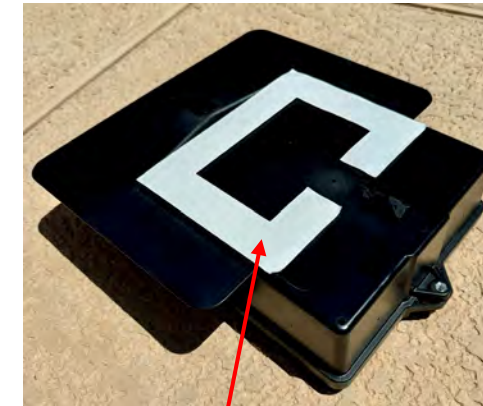
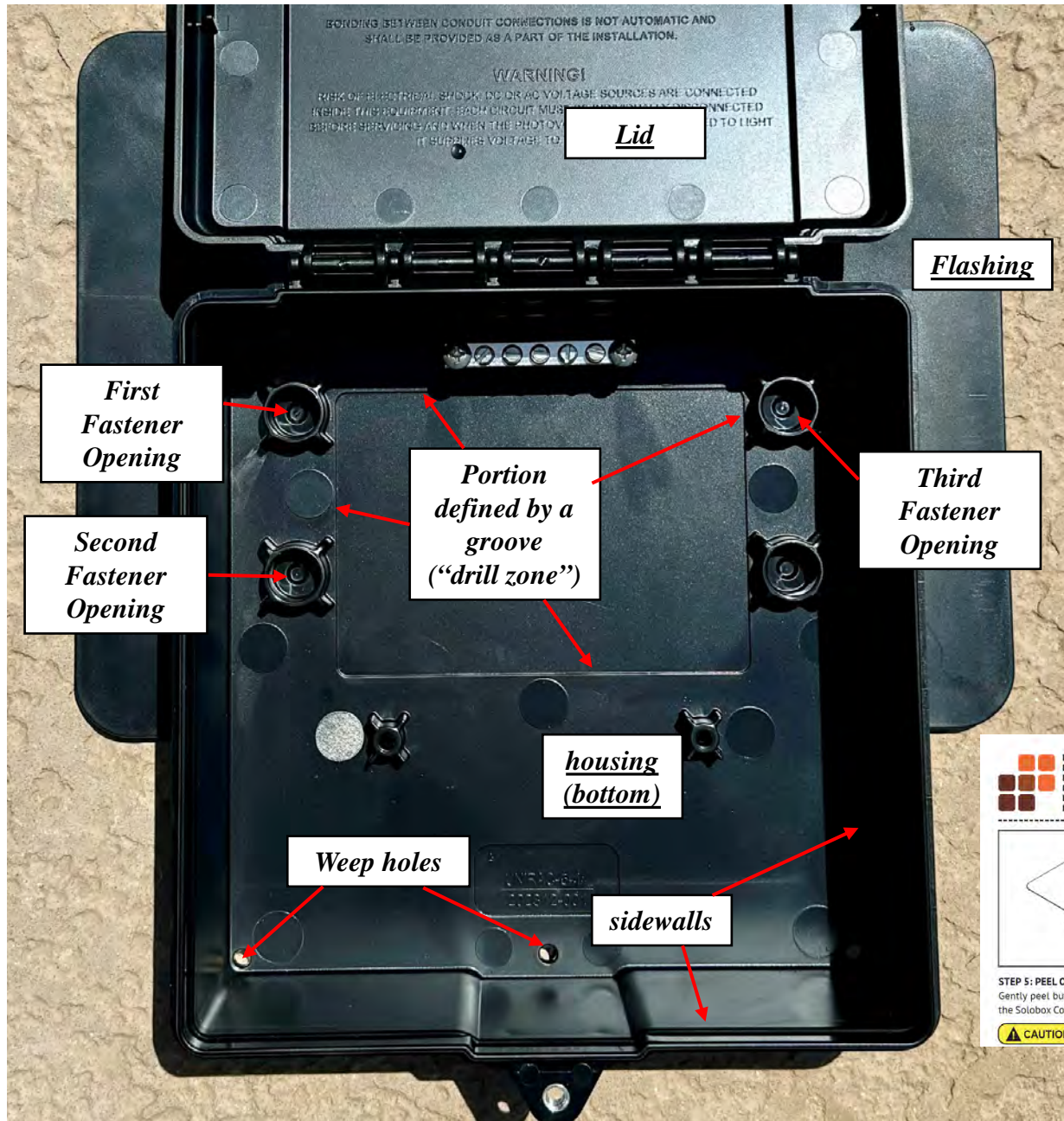
a **portion defined in the interior side of the bottom defined by a groove**, the portion defining a position for creating a hole in the bottom;

**sealant** disposed on the exterior side of the bottom; and

a **plurality of fastener openings** in the bottom, each fastener opening configured for a fastener positionable within the fastener opening, wherein securing a fastener through a fastener opening of the plurality of fastener openings contributes to securing the housing to the roof,

wherein each of the plurality of fastener openings in the bottom comprises a **boss**, each boss extending away from a bottom interior surface of the bottom, and

wherein a **thickness of the bottom** is greater than a **thickness of the flashing**.



**Sealant (shown on exterior of bottom)**

